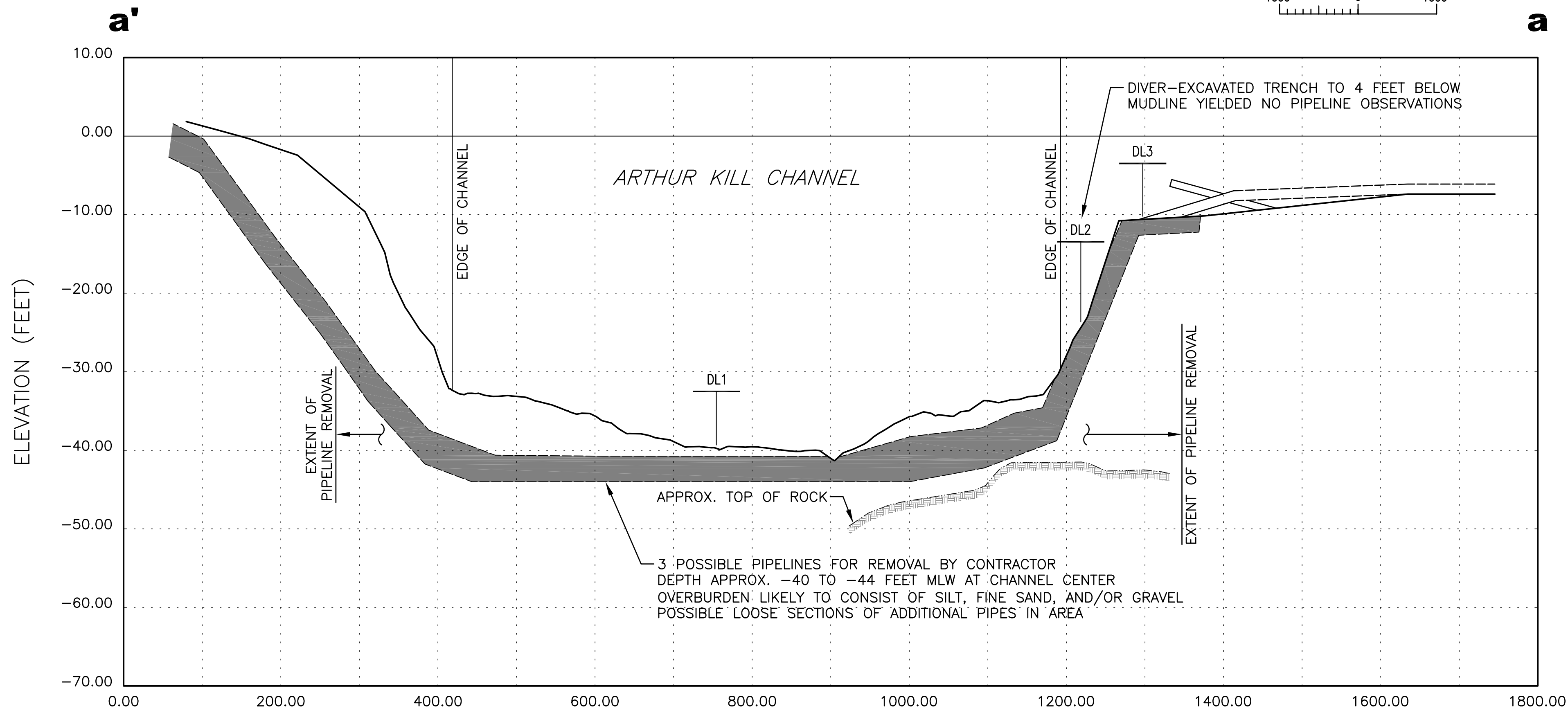
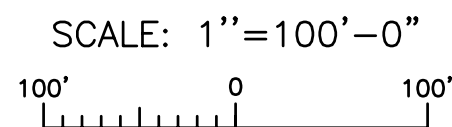


UTILITY LOCATION PLAN "A"



SECTION a'-a

HORIZ. SCALE: 1"=100'-0"



VERT. SCALE: 1"=10'-0"



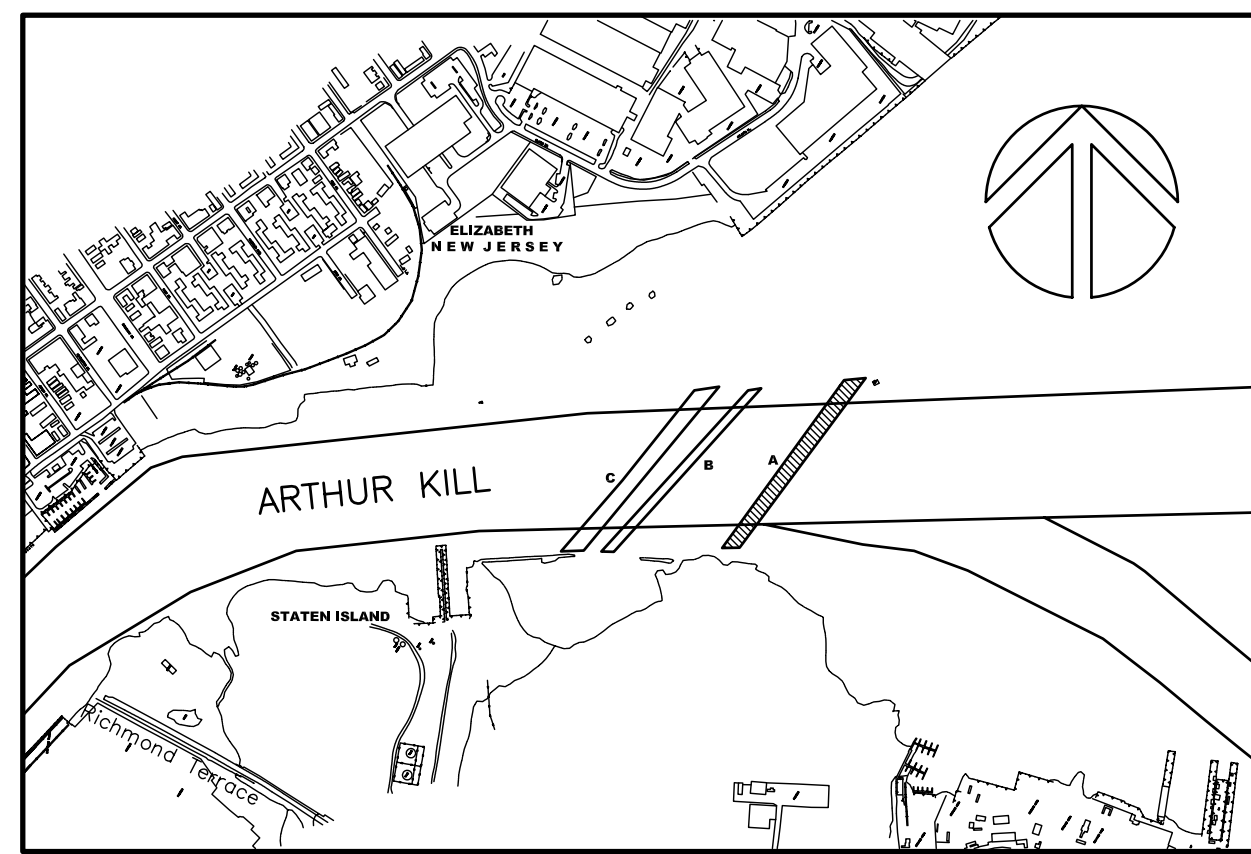
NOTES

- HORIZONTAL DATUM IS BASED ON THE NEW JERSEY STATE PLANE FEET - NORTH AMERICAN DATUM OF 1983 (NAD 83).
- ALL CONTOURS ARE IN FEET RELATIVE TO U.S. ARMY CORPS OF ENGINEERS MEAN LOW WATER DATUM, WHICH IS 2.33 FEET BELOW NGVD 29.
- BATHYMETRIC CONTOURS DEVELOPED FROM U.S. ARMY CORPS OF ENGINEERS HYDROGRAPHIC SURVEY DRAWING FILE No. 1245A, DATED JUNE 19, 2003. AND CAN ONLY REFLECT BOTTOM CONDITIONS AT TIME OF SURVEY.
- DIVE LOCATIONS NUMBERED DL1 THROUGH DL12 REPRESENT LOCATIONS OF UNDERWATER INVESTIGATION PERFORMED BY A U.S. ARMY CORPS OF ENGINEERS CONTRACTOR IN AUGUST AND SEPTEMBER 2004.
- UTILITY REMOVAL AREAS "A" AND "B" REPRESENT GROUPING OF PIPELINES THAT ARE SIMILAR IN LOCATION, ORIENTATION, AND/OR CONSTRUCTION, AND ARE TO BE REMOVED UNDER THIS CONTRACT.
- UTILITY DEBRIS REMOVAL AREA "C" REPRESENTS A GROUPING OF PIPE DEBRIS THAT IS IN A SIMILAR LOCATION, ORIENTATION, AND/OR CONSTRUCTION, AND IS TO BE REMOVED.
- INTERPRETATIONS OF CROSS-SECTIONS a'-a, b'-b, AND c'-c HAVE BEEN DERIVED FROM HYDROGRAPHIC SURVEY DATA, SIDESCAN SONAR IMAGERY, MARINE MAGNETOMETER DATA, SHALLOW SEISMIC REFLECTION DATA, DIVER OBSERVATIONS, AND HISTORICAL DOCUMENTATION.
- SECTIONS a'-a, b'-b, AND c'-c SHOULD BE ASSUMED BY THE CONTRACTOR TO BE APPROXIMATE PROJECTIONS THAT ARE REPRESENTATIVE OF THE GENERAL CONDITIONS OF THE EXTENTS DEFINED BY AREAS A, B, AND C. MULTIPLE PIPELINES IN EACH CROSSING AREA ARE LIKELY TO OCCUR AT DIFFERENT ELEVATIONS AND X-Y LOCATIONS WITHIN EACH CROSSING AREA AS INDICATED IN SECTIONS a'-a, b'-b, AND c'-c.
- THE SIDESCAN SONAR IMAGE PLAN ON DRAWING C-404 IS A CONTOUR MAP OF DATA COLLECTED JULY 2004 BY A U.S. ARMY CORPS OF ENGINEERS CONTRACTOR. DENSELY SPACED CONTOUR LINES REPRESENT DISTORTIONS IN THE LOCAL MAGNETIC FIELD THAT ARE CAUSED BY FERROUS OBJECTS SUCH AS STEEL OR WROUGHT IRON PIPELINES.
- THE SIDESCAN SONAR IMAGE PLAN ON DRAWING C-404 IS A MOSAIC OF SIDESCAN SONAR IMAGERY COLLECTED APRIL-JUNE 2004 BY A U.S. ARMY CORPS OF ENGINEERS CONTRACTOR. THE IMAGERY IS PRESENTED AS ILLUMINATED FROM THE SOUTH SO THAT AREAS OF HIGH REFLECTIVITY ARE BRIGHT AND AREAS OF LOW REFLECTIVITY ARE DARK.
- LOCATIONS OF KNOWN PIPELINES TO BE REMOVED HAVE BEEN ASCERTAINED BY DIVERS UTILIZING PLUMB LINES AND DIFFERENTIAL GLOBAL POSITIONING SYSTEM (DGPS).
- PIPELINES OBSERVED BY DIVERS AND LISTED IN TABLE 1 HAVE BEEN ASSOCIATED WITH KNOWN HISTORIC PIPELINES BASED ON INTERPRETATIONS THAT DRAW UPON APPROXIMATE LOCATION, SIZE, AND CONDITION ON THE LINES.
- PREDICTIONS AS TO THE HISTORY OR CONTAINED PRODUCT ARE ONLY ESTIMATES. THE CONTRACTOR MUST EXERCISE CAUTION WHEN HANDLING ANY LINE FOR REMOVAL IN ORDER TO PREVENT SPILLS AND/OR DAMAGE TO IN-SERVICE UTILITIES OR STRUCTURES.

TABLE 1 PIPELINE INFORMATION								
PIPELINE	ASSUMED ORIGIN	REFERENCE DRAWING/DOCUMENTS	PIPELINE TYPE (PIPELINE DIAMETERS ARE SHOWN AS NOMINAL)	FIELD OBSERVATIONS OF NOTE	CAPPED/OPEN/INTACT	PRODUCT PRESENT?	APPROXIMATE LENGTH OF PIPE FOR REMOVAL	APPROX. BARE PIPE WEIGHT (TONS)
1	COASTAL	COASTAL PIPELINE CO GULFPORT-BAYONNE 2.CAL	STEEL; 12" DIAMETER; 0.500" W.T.; 65.42 LBS/FT; API 5L; P.E.; DRL; COATED WITH TGF-3 AND 2" CONCRETE	PRESENCE OF SADDLE CLAMPS ON PIPE COATING EASILY REMOVED	INTACT, EVIDENCE OF POSSIBLE REPAIRS?	UNKNOWN	1360'	45
2	COASTAL	TEXAS PIPE LINE CO GULFPORT-BAYONNE.CAL	STEEL; 12" DIAMETER; CLASS 1 STEEL PIPE	SAW-CUT OBSERVED IN PIPE, REVEALING 1" OPEN GAP IN PIPELINE	CUT/OPEN	UNLIKELY	1360'	45
3	TETCO/DUKE	COASTAL PIPELINE CO GULFPORT-BAYONNE 2.CAL	STEEL; 12" DIAMETER NO FURTHER INFORMATION	NOT OBSERVED	POSSIBLY REMOVED WITH REMNANT DEBRIS REMAINING	UNLIKELY	-	-

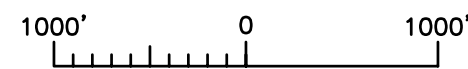
TABLE 2 LOCATIONS OF KNOWN PIPELINES TO BE REMOVED			
DIVE LOCATION	PIPELINE	LOCATION	COORDINATES
DL3	1	ENTERING MUDLINE	N 660977/E 583083
DL3	1	18" ABOVE MUDLINE	N 661045/E 583201
DL3	2	ENTERING MUDLINE	N 660990/E 583072
DL3	2	18" ABOVE MUDLINE	N 661049/E 583202

TABLE 3 UTILITY REMOVAL AREA "A" BOUNDARY	
NORTHING	EASTING
661042	583056
661045	583163
660104	582463
660104	582374



KEY PLAN

SCALE: 1"=1000'-0"



Rev.	Date	Design	Drawn	Checked	Reviewed	Submitted	Description
0	5/22/05	J.S.W.	R.B.				
1	6/1/05	J.S.W.	R.B.				
2	6/1/05	J.S.W.	R.B.				
3	6/1/05	J.S.W.	R.B.				
4	6/1/05	J.S.W.	R.B.				
5	6/1/05	J.S.W.	R.B.				
6	6/1/05	J.S.W.	R.B.				
7	6/1/05	J.S.W.	R.B.				
8	6/1/05	J.S.W.	R.B.				
9	6/1/05	J.S.W.	R.B.				
10	6/1/05	J.S.W.	R.B.				
11	6/1/05	J.S.W.	R.B.				
12	6/1/05	J.S.W.	R.B.				
13	6/1/05	J.S.W.	R.B.				
14	6/1/05	J.S.W.	R.B.				
15	6/1/05	J.S.W.	R.B.				
16	6/1/05	J.S.W.	R.B.				
17	6/1/05	J.S.W.	R.B.				
18	6/1/05	J.S.W.	R.B.				
19	6/1/05	J.S.W.	R.B.				
20	6/1/05	J.S.W.	R.B.				
21	6/1/05	J.S.W.	R.B.				
22	6/1/05	J.S.W.	R.B.				
23	6/1/05	J.S.W.	R.B.				
24	6/1/05	J.S.W.	R.B.				
25	6/1/05	J.S.W.	R.B.				
26	6/1/05	J.S.W.	R.B.				
27	6/1/05	J.S.W.	R.B.				
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30	6/1/05	J.S.W.	R.B.				
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99	6/1/05	J.S.W.	R.B.				
100	6/1/05	J.S.W.	R.B.				

U.S. ARMY ENGINEER DIVISION CORPS OF ENGINEERS NEW YORK DISTRICT	Designed by: J.S.W. Drawn by: R.B. Reviewed by: J.S.W. Submitted by: J.S.W.	Date: 5/22/05 Design file no. 403 Drawing code: J.S.W. File name: M2004AC-0300X Project title: Arthur Kill Plot scale: 1"=1000'
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UTILITY LOCATION AND REMOVAL PROJECT ARTHUR KILL WATERWAY AK-2 AND AK-3 PROJECT AREAS	UTILITY LOCATION PLAN "A" AND CROSS-SECTION
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